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THE INTERNATIONAL MONETARY SYSTEM: PAST, PRESENT, AND FUTURE*

*DOMINICK SALVATORE***

INTRODUCTION

THE world today is at a crossroads in international monetary relations. The road taken and the reforms adopted during the next few years will shape the twenty-first century's international monetary system and will have a significant impact on socio-economic conditions around the world. The choices are (a) revert back to a fixed exchange rate system such as the Bretton Woods System; (b) adopt a truly freely flexible exchange rate system; (c) move toward a monetary system where international payment adjustments will rely on macroeconomic policy coordination among the leading industrial countries and exchange rate management to a degree that has until now proved elusive; or (d) revise the present international exchange rate arrangements.

Which of these diverging directions the world will take depends to a large extent on how the leading industrial nations perceive that they can best solve the major monetary problems that they face today. This has certainly been the case historically. For example, the Bretton Woods System set up after World War II was characterized by fixed exchange rates primarily as a reaction to the unstable exchange markets of the interwar period. Today's more flexible exchange rate system came into existence in the early 1970s because the Bretton Woods System was too rigid and did not provide an adequate adjustment mechanism to the large payments imbalances of the leading nations, especially those of the United States.[1] Similarly, the demand for reforms of the present international monetary system and the outlines of the probable international economic order of the twenty-first century can, to a large extent I believe, be inferred from or be regarded as a response to the need to solve today's major international economic problems. These are the huge international trade imbalances of the leading countries, excessively volatile and persistent disequilibria of exchange rates, and the difficulty in conducting domestic stabilization (i.e., monetary and fiscal) policies in a world char-

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1. *See* Dominick Salvatore, International Economics 642-50 (4th ed. 1993).

acterized by huge and persistent international capital flows resulting from the integration of world capital markets.

This Essay first reviews the workings of the present international monetary system and the reasons for its inability to solve today's major international economic problems. It then explores the major alternative monetary systems available and examines how they would address and resolve these problems. Finally, and most importantly, it outlines the main features of what the future international monetary order is likely to be. My main theme is that while we cannot determine the details of the future international monetary system, we can infer its main features and broad outlines from the need to solve today's international monetary problems and from the constraints imposed by what is politically feasible.

I. THE PRESENT INTERNATIONAL MONETARY SYSTEM

The present international monetary system has four main characteristics.

(1) A wide variety of exchange rate arrangements exist. Of the 172 members of the International Monetary Fund (IMF), 76 (all developing countries) have pegged or quasi-pegged exchange arrangements, 13 (including 9 of the 12 members of the European Economic Community) have managed flexibility, and another 83 (including the U.S., Japan, the United Kingdom, Italy, and Canada) have full flexibility.[2] Two-thirds to four-fifths of world trade is, however, conducted under managed or full flexibility.[3] Therefore, the present system can be regarded more as a flexible than a fixed-exchange rate regime.

(2) Countries have almost complete freedom of choice of exchange rate regimes. All that the 1976 Jamaica Accords (which formally recognized prevailing exchange rate arrangements) requires is that a nation's exchange rate actions not disrupt its trade partners nor the world economy.[4]

(3) Exchange rate variability has been substantial. This is true for nominal and real, bilateral and effective, short-run and long-run exchange rates. The IMF estimated that exchange rate variability has been about 5 times larger during the period of flexible exchange rate (i.e., since 1971) than under the preceding fixed exchange rate or Bretton Woods System. Exchange rate variability of 2 to 3% per day and 20-30% per year has been common under the present system. Exchange rate variability has been larger than originally anticipated, does not seem to be declining over time, and is for the most part unexpected.[5]

(4) Contrary to earlier expectations, official intervention in foreign

2. *See* International Monetary Fund, International Financial Statistics 8 (January 1994).

3. *See* International Monetary Fund, The Exchange Rate System: Lessons of the Past and Options for the Future 3 (Occasional Paper No. 30, July 1984) [hereinafter Lessons of the Past].

4. *See* Salvatore, *supra* note 1, at 655.

5. *See* Lessons of the Past, *supra* note 3, at 5.

> exchange markets (and therefore the need for international reserves) has not diminished significantly under the present flexible exchange rate system as compared with the previous fixed exchange rate system. Nations have intervened in foreign exchange markets not only to smooth out day-to-day movements, but also to resist trends (especially during the 1970s and since the mid-1980s), and to keep exchange rates within the soft implicit target zones agreed upon by the leading industrial nations in 1987.[6]

The period of the flexible exchange rate system since 1971 has been characterized by far greater macroeconomic instability in the leading industrial countries than during the previous fixed exchange rate or Bretton Woods period. Two rounds of large oil price increases (1973-74 and 1979-80) jolted the system, which resulted in double digit inflation and led to recessions (as nations wrought to break the inflationary spiral). The period also saw the rapid growth of the Eurodollar market and the liberalization of capital controls. The resulting sharp increase in international capital flows as well as the institutional changes and adjustments following the collapse of the Bretton Woods System in 1971, rather than the prevailing flexible exchange rates, were the primary cause of the large macroeconomic instability suffered by the leading industrial counties, however. Indeed, it is now widely agreed that no fixed exchange rate system could have survived the combination of oil shocks, portfolio shifts, and structural and institutional changes that the world faced during the past two decades. It must also be remembered that the present managed exchange rate system was not established deliberately as the result of an international agreement, but was instead forced upon the world by default by the collapse of the Bretton Woods System because of lack of an adequate adjustment mechanism and dollar overvaluation.[7]

The present international financial system does, however, face some important shortcomings. These are the large volatility of exchange rates, the gross and persistent misalignments of exchange rates, and the failure to promote greater coordination of economic policies among the leading industrial nations. There is little disagreement that exchange rates have exhibited large volatility since the establishment of the present managed exchange rate system. There is also no question that large exchange rate volatility, by adding to transaction costs, has affected the volume and pattern of international trade. These costs, however, are not very large and are not greater than those faced by firms in many other markets, as in the metal and agricultural sectors.[8] Firms engaged in international trade also seem to have learned to deal with volatility by pursuing hedging and diversification strategies quickly and at little cost. The IMF concluded that exchange rate volatility did not seem to have had a

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6. *See id.* at 9.

7. *See* Salvatore, *supra* note 1, at 652-57.

8. *See* International Monetary Fund, Exchange Rate Volatility and World Trade 8-13 (Occasional Paper No. 28, 1984).

significantly adverse effect on international trade.[9] Measures could, of course, be devised to reduce exchange rate volatility, but the costs of these measures might not justify the benefits resulting from them.

Gross and persistent exchange rate misalignments are potentially more damaging to the flow of international trade and investments than excessive exchange rate volatility. Misalignment refers to the departure of exchange rates from their long-run, competitive equilibrium levels. An overvalued currency has the effect of an export tax and an import subsidy on the nation and, as such, it reduces the international competitiveness of the nation and distorts the pattern of specialization, trade, and payments. A significant exchange rate misalignment that persists for years cannot possibly be hedged away and can impose significant real costs on the economy in the form of unemployment, idle capacity, bankruptcy, and protectionist legislation.[10]

The most recent and notorious example of exchange rate misalignment is the overvaluation of the U.S. dollar during the 1980s. According to the U.S. Federal Reserve System's Board of Governors, from 1980 to its peak in February 1985, the dollar appreciated by about 40% on a trade-weighted basis against the currency of the ten largest industrial countries. This appreciation resulted in the huge trade deficit of the United States and equally large combined trade surplus of Japan and Germany. It also resulted in increasing calls for and actual trade protectionism in the United States. It has been estimated that the 1985 U.S. trade deficit was $60 to $70 billion greater (about twice as large) than it would otherwise have been had the dollar remained at its 1980 level, and that this deficit cost about 2 million jobs in the United States.[11] Despite the fact that by the end of 1988 the international value of the dollar was slightly below its 1980-1981 level, so that all of its overvaluation had been eliminated, large global trade imbalances remained and did not show signs of declining rapidly. Economists have borrowed the term "hysteresis" from the field of physics to characterize the failure of trade balances to return to their original equilibrium once exchange rate misalignments have been corrected.

While misaligned exchange rates can be regarded as the immediate cause of prevailing global trade imbalances, however, they were themselves the result of internal structural disequilibria in the leading nations. It is these structural disequilibria and not exchange rate misalignments that were and are the fundamental cause of the global imbalances facing the leading industrial countries today. What could possibly be blamed

9. *See id.* at 16-22.

10. *Cf.* Salvatore, *supra* note 1, at 659-63 (discussing problems with present exchange rate arrangements).

11. *Cf.* Andrew Crockett & Morris Goldstein, International Monetary Fund, Strengthening the International Monetary System: Exchange Rates, Surveillance, and Objective Indicators 1-6 (Occasional Paper No. 50, 1987) (considering large and persistent misalignments of real exchange rates).

on the current international financial system is its failure to provide smoother and more timely adjustment to such large and persistent global imbalances as the trade and budget deficits of the United States, the trade surpluses of Japan and Germany, and the large and persistent unemployment in Europe (including Germany) and Canada. It seems that trade flows now respond with longer than usual lags (ranging up to two years) to exchange rate changes (for reasons examined in the next section).

More serious is the charge that the present international financial system failed to promote greater coordination of macroeconomic policies, especially fiscal policies, among the leading industrial countries. To a large extent this is due to the very different inflation-unemployment trade off in the United States, France, United Kingdom, Italy, and Canada on the one hand, and in Germany and Japan on the other. Policy coordination under the present system has taken place only occasionally and has been very limited in scope. One such episode was in 1978 when Germany agreed to serve as a "locomotive" to stimulate growth in the world economy. Another episode of limited policy coordination was the Plaza Agreement of September 1985, under which the G-5 countries (United States, Japan, Germany, United Kingdom, and France) intervened in foreign exchange markets to induce a gradual depreciation or soft landing of the dollar in order to eliminate its large overvaluation. A related example of successful but limited coordination of policies is the Louvre Accord of February 1987, which established soft reference ranges or target zones for the dollar-yen and dollar-mark exchange rates. Despite these examples, a great deal of dissatisfaction with the operation of the present international monetary system remains, and there are widespread calls for reforms.[12]

II. PRICE AND INCOME ELASTICITIES, AND GLOBAL IMBALANCES

According to international economic theory, a depreciation of a country's currency will improve its trade balance by stimulating the nation's exports and discouraging imports if the sum of the price elasticities of the foreign demand for the nations's export (n_X) and the price elasticity of the nation's demand for imports (n_M) exceeds the absolute value of one. This is known as the Marshall-Lerner condition.[13] Even if such a condition is satisfied, so that a devaluation or depreciation of the deficit country's currency does improve its trade balance, such a policy would not be feasible if the Marshall-Lerner condition is barely satisfied. The reason is

12. *See* Salvatore, *supra* note 1, at 627-28; *see generally* Foreign Exchange Issues, Capital Markets, and International Banking in the 1990s (Dominick Salvatore & Khosrow Fatemi eds., 1993); Handbook of Monetary Policies in Developed Countries (Dominick Salvatore & Michele Fratianni eds., 1993); Handbook of Open Economies Macroeconomics (Dominick Salvatore et al. eds., 1994); Handbook of National Economic Policies (Dominick Salvatore ed., 1992)Protectionism and World Welfare (Dominick Salvatore ed., 1993).

13. *See* Salvatore, *supra* note 1, at 465.

that the adjustment to the trade deficit will then be rather slow and a large devaluation or depreciation may be required, and this is inflationary.

During the past four decades a large number of empirical studies have been undertaken to measure price elasticities in international trade. In general, they have found that the Marshall-Lerner condition is satisfied (so that the foreign exchange market is stable) but it is only barely satisfied.[14] This means that the adjustment to the trade balance that can be expected within one year of a devaluation or depreciation is minimal. Answering the question of why this is the case offers the reasons for the slow adjustment to the trade imbalance resulting by the sharp depreciation of the dollar and equally large appreciations of the Japanese Yen and German mark since February 1985.

An important reason for the low price elasticities in international trade and small adjustment to the trade imbalances is due to the lags from exchange rate changes to price changes, from price changes to changes in purchases, and from the latter to actual shipments and data recordings. It has been estimated that because of these three lags it normally takes from twelve to eighteen months for the trade balance to respond to changes in exchange rates. With the U.S. dollar starting to depreciate in February 1985, no improvements to the U.S. trade balance were to be expected before the fall of 1986 or early 1987. In fact, there is now evidence that the real trade balance of the United States started to improve during the last quarter of 1986 and the nominal trade balance began to improve only during the last quarter of 1987.[15]

The second reason for the long delay in the response to exchange rate changes is that for a while the increase in the price of imports overwhelms the reduction in the quantity of imports, so that the domestic-currency value of imports actually increases before it falls (the so-called J-curve effect). In the recent U.S. experience, the continuing or ratcheting depreciation of the dollar from 1985 to 1988 meant that just as the effect of a particular round of depreciation was about to be reflected in an improvement in the U.S. trade balance, another round of depreciation took place (with its original increase in the dollar value of U.S. imports) which prevented the improvement from the original round of depreciation from showing its effect. This is sometimes referred to as rolling-J-curve or "cascading" effect.[16]

Eventually, however, the final cumulative effects of these recurring rounds of dollar depreciations began to show through in 1988 and 1989 with substantial, though long-delayed reductions in the U.S. trade deficit with respect to most nations of the world, except Japan. The third reason for the slow response of the U.S. trade balance to exchange rate

14. *See id.*

15. *See* Paul R. Krugman, Has the Adjustment Process Worked? 13-20 (1991).

16. *See id.* at 33-44.

changes is due to the fact that foreign firms, having struggled to successfully establish and increase their market share in the U.S., have been very reluctant to give it up when the dollar started to depreciate, and they have been willing to absorb most of the price increase resulting from the dollar depreciation out of their profits. In the jargon of the profession, the "passthrough" effect from dollar depreciation to increase in the dollar price of U.S. imports has been small. It is only with the latest round of dollar depreciation that we are beginning to see substantial increase in the dollar price of imports to the United States. For example, even though the dollar depreciated by over 40% between 1985 and 1988, the increase in the dollar price of Japanese imports to the United States was less 20%, and most of this increase took place only during 1987 and 1988.[17] It is now likely that any further dollar depreciation will be fully reflected in increases in the dollar price of U.S. imports, and this is likely to reinforce the adjustment process that is only recently taking effect.

Finally, it took time for U.S. and foreign firms producing tradeable commodities to be convinced that the early depreciation of the dollar would continue and not be reversed. Because it is very costly to plan and build or dismantle production facilities and enter or leave new markets, firms have acted with longer than usual response lags to exchange rate changes. In fact, many U.S. firms have increased capacity utilization without adding much new capacity during the past two years.[18] There is also the difficulty of re-entering a market and re-introducing a product line after they have been abandoned for several years and after the industrial base of the nation has eroded significantly. Once a market is lost, it is usually very difficult to recapture it.

III. ALTERNATIVE INTERNATIONAL MONETARY SYSTEMS

We now briefly examine the various international monetary systems in order to determine the one that would best be suited to deal with the international financial problems faced by the world economy today. The systems examined are as follows: the gold standard, a fixed exchange system without gold, a freely flexible exchange rate system, target zones, systems based on close international policy coordination, and others. The presentation will necessarily be brief and will be directed to identifying the most important characteristic of each system as well as its main advantages and disadvantages.

The Gold Standard. The gold standard operated from 1880 to 1914. Under it, a balance of payment deficit was to be automatically corrected by an outflow of gold from the deficit nation, a reduction in its money supply, and a decline in prices, which would stimulate exports and discourage imports. The opposite would occur in the surplus nation. The process would continue until trade balances were in equilibrium. This is

17. *See id.* at 13-20.
18. *See id.* at 33-44.

the Hume's celebrated price-specie-flow mechanism. To achieve external balance the nation thus has to give up control over its money supply. The overall growth of the money supply for all the nations is limited by the amount of newly mined gold. This imparts a price or noninflationary discipline to the system. Only very few economists and politicians advocate going back to the gold standard, and there is practically no chance for its reestablishment today. The reason is that no nation wants to give up control over its money supply and be unable to use monetary policy to achieve such important internal objectives as full employment without inflation, together with an adequate rate of growth.[19]

A fixed exchange rate system without gold. Under such a system, a nation would define the par value (exchange rate) of its currency and the allowed band of fluctuation about the par value, and stand ready to buy or sell its currency on the foreign exchange market (by drawing down or accumulating its reserves of other currencies) in order to prevent the exchange rate from moving outside the allowed band of fluctuation. A trade deficit would be financed by a loss of international reserves, while a trade surplus would be settled by an increase in the nations's international reserves. Under such a system, a nation with a balance of payments deficit would have to reduce its money supply (or increase it at a slower rate than the surplus nation) so that prices would fall in the deficit nation relative to the surplus nation until trade imbalances are corrected. As in the case of the gold standard, however, the nation would have to give up control over its money supply and the use of monetary policy to achieve its domestic goals. Such a system could be inflationary (with little or no effect on trade balances) if all nations increased their money supply at about the same rate. The Bretton Woods System (the system that operated from the end of World War II to 1971) was a hybrid system or a gold-exchange standard, whereby the United States fixed the price of the dollar in terms of gold and all the other nations then fixed the value of their currency in terms of the dollar. The system collapsed because the United States was unwilling to abide by rules of the system and give up control over its money supply.[20] This serious shortcoming also militates against the reestablishment of a fixed exchange rate system today.

Freely flexible exchange rate system. With a freely flexible exchange rate system, exchange rates are determined by the unrestricted operation of the market forces of demand and supply for foreign exchange. This would, for the most part, insulate a nation from economic disturbances arising abroad and allow the nation to use monetary policy (*i.e.*, to change its money supply) to pursue domestic goals. Each nation would thus be able to choose its desired inflation-unemployment trade off without much regard for balance of payments considerations. A balance of payments deficit would be corrected automatically by a depreciation of

19. For a general discussion of the gold standard, see Salvatore, *supra* note 1, at 639-41.

20. *See generally id.* at 642-56 (discussing the Bretton Woods system).

the nation's currency, while a surplus would be corrected by an appreciation of the nation's currency. The disadvantage of such a system is that in a world of highly integrated capital markets and huge and rapid international capital flows in response to even minor changes in economic variables and "news", exchange rates are likely to be very volatile, to be subject to over-shooting, and to possibly drift away from equilibrium by substantial amounts and for long periods of time. This seriously distorts the pattern for international specialization and trade. Freed from the obligation to maintain fixed exchange rates, central banks might also embark on inflationary policies so that the monetary discipline (the so-called "anchor" argument) of a fixed exchange rate system would be lost. Because of these serious shortcomings, there is not much support and there is little chance that a truly freely flexible exchange rate system would be established today.[21]

Target zones. Target zones are an attempt to have a system that incorporates the advantages of both a fixed and a flexible exchange rate system while avoiding the shortcomings of either. Under such a system, the leading industrial nations estimate the equilibrium exchange rate and agree on the range of allowed fluctuation. John Williamson suggested a band of allowed fluctuation of 10% above and below the equilibrium exchange rate or par value.[22] The exchange rate is determined by the forces of demand and supply within the allowed band of fluctuation (thus taking advantage of this important trade equilibrating mechanism) and prevented from moving outside the target zones by official intervention in foreign exchange markets (thus avoiding the worse excesses of overshooting and misalignments of a flexible exchange rate system). The target zones would be soft, however, and would be changed when the underlying equilibrium exchange rate moves outside or near the boundaries of the target zone. Though not made explicit, the leading industrial nations seemed to have agreed upon some such "soft" target of "reference zones" for the exchange rate between the dollar and the yen and between the dollar and the German mark since the Louvre Accord of February 1987. The sliding boundaries of these target zones were much smaller than the 10% advocated by Williamson, however. Critics of target zones believe that target zones embody not the best but the worst characteristics of fixed and flexible exchange rate systems.[23] As in the case of flexible rates, target zones allow substantial fluctuation and volatility in exchange rates and can be inflationary. As in the case of fixed exchange rates, target zones can only be defended by official interventions in foreign exchange markets and thus reduce the monetary autonomy of the nation. In response to this criticism, supporters of target zones, such as Williamson,

21. *See* Salvatore, *supra* note 1, at 659-63.

22. *See generally* Marcus H. Miller & John Williamson, The International Monetary System: An Analysis of Alternative Regimes 1033 (1987).

23. *See* Martin S. Feldstein, *Distinguished Lecture on Economics in Government: Thinking About International Economic Coordination*, 2 J. Econ. Persp. 1-13 (1988).

have extended their blueprint to require substantial policy coordination on the part of the leading industrial nations so as to reduce the need for intervention in foreign exchange markets to keep exchange rates within the target zones.[24] Many economists, however, point out that extensive policy coordination among the leading countries is not feasible under present conditions.[25]

International monetary systems based on policy coordination. There are several international monetary systems based on extensive policy coordination among the leading countries. One system crucially dependent on policy coordination is the one proposed by Ronald McKinnon.[26] Under this system, the United States, Japan, and Germany (the three major industrial countries) would fix the exchange rate among their currencies and then closely coordinate their monetary policies to maintain fixed exchange rates. A tendency for the dollar to depreciate vis-à-vis the yen would signal that the United States should reduce the growth rate of its money supply, while Japan should increase it. The net overall increase in the money supply of these three countries would then be at a rate consistent with the non-inflationary expansion of the world economy.

Another proposal introduced by the IMF Interim Committee in 1986, which was discussed at the Tokyo Round of multilateral trade negotiation (1974-1977) and supported by U.S. Treasury Secretary Baker in 1988 is for the development of *commodity indexes* (including gold) to signal the type of coordinated macro-policies for nations to follow under the supervision of the Fund in order to keep exchange rates stable at their equilibrium level over time.[27] A rise or fall in the index in a nation would signal the need for restrictive or expansionary policies for the nation. Stability of the index for the world as a whole would be the anchor for noninflationary world expansion.

This type of close macroeconomic policy coordination is virtually impossible under present conditions. For example, during the past few years, the United States has been unwilling or unable to reduce its huge budget deficit substantially and rapidly; Germany has been unwilling to stimulate its economy even though it faces an unemployment rate of more than eight percent of its labor force; and Japan has been very reluctant to dismantle its protectionistic policies to allow much more imports from the United States so as to help correct the huge trade imbalance between the two nations. As long as these nations have very different inflation-unemployment trade offs, effective and substantial macroeconomic policy coordination is practically impossible. Indeed,

24. *See* Miller & Williamson, *supra* note 22, at 1031-48.

25. *See* Feldstein, *supra* note 23, at 1-13.

26. *See* Ronald I. McKinnon, *Monetary and Exchange Rate Policies for International Financial Stability: A Proposal*, 2 J. Econ. Persp. 83-103 (1988).

27. *See generally* Morris Goldstein et al., International Monetary Fund, Policy Issues in the Evolving International Monetary System 28-32 (Occasional Paper No. 96, 1992) (discussing the strengthening of multilateral surveillance and policy coordination).

these nations consider the ability to choose different inflation-unemployment trade offs to be an important advantage of the present international monetary system.

It was sometimes asserted that the European Monetary System (EMS) provided evidence that significant macroeconomic policy coordination was possible.[28] After the recent (1992-1993) monetary crisis and collapse of exchange rate arrangements in Europe, however, no one suggests this any longer. Even before the recent monetary crisis in Europe, however, critics had pointed out that macroeconomic policy coordination was more feasible in Europe than for the world as whole because of the greater homogeneity of the major European countries than among the G-7 countries (the United States, Japan, Germany, France, Italy, and Canada) and the willingness of the European countries to accept the dominant position of Germany. Furthermore, empirical research by Frankel and Rockett has shown that nations gain from international policy coordination only about half of the time and that the welfare gains from coordination, when they occur, are very small.

Other international monetary systems. There is another class of international monetary systems which consider the huge international capital flows in today's highly integrated international capital markets as the primary cause of the exchange rate instability and global imbalances afflicting the world economy today. They are, therefore, based on restricting international speculative capital flows. James Tobin would do this with a transaction tax which becomes progressively higher the shorter the duration of the transaction in order "to throw some sand in the wheels of our excessively efficient international money markets."[29] Dornbusch and Frankel would instead reduce financial capital flows internationally with dual exchange rates—a less flexible one for trade transactions, and a more flexible one for purely financial transactions not related to international trade and investments.[30] By restricting international "hot" money flows by capital market segmentation or the decoupling of asset markets, Tobin and Dornbusch believe that the international financial system can be made to operate much more smoothly and without any need for close policy coordination by the leading industrial countries—which they regard as neither feasible nor useful.[31] Critics of these proposals, however, correctly point out that it is next to impossible to separate "nonproductive" or speculative capital flows from "productive" ones related to international trade and investments.[32] We might add that capital is fungible so that evasion of such a transaction

28. *See* Salvatore, *supra* note 1, at 617-19.

29. James Tobin, *A Proposal for International Monetary Reform*, 1978 E. Econ. J. 153, 154.

30. *See* Rudiger Dornbusch & Jeffrey Frankel, The Flexible Exchange Rate System: Experience and Alternatives 46-50 (NBER Working Paper No. 2464, 1987).

31. *See* Tobin, *supra* note 29, at 153-59; Dornbusch & Frankel, *supra* note 30, at 46-50.

32. *See* Feldstein, *supra* note 23, at 1-13.

tax or more volatile exchange rate would greatly limit the effectiveness of these efforts.

Finally, there is Cooper's utopian single world currency proposal.[33] With a single currency, of course, there would be no balance of payments or exchange rates problems. But nations would have no control over their money supply and be unable to conduct any type of national economic or stabilization policy. In short, having a single world currency, as advocated by Cooper, would be like "throwing away the baby with the bath water."

IV. THE FUTURE INTERNATIONAL MONETARY SYSTEM

The broad outlines of the international monetary system of the future can be inferred from the need to solve the serious financial problems faced by the leading industrial countries today in the face of the political and economic constraints that they face. What seems certain is that in a world of huge international capital flows such as we have today, no fixed exchange rate system could probably survive without extensive controls on international capital flows. Furthermore, nations seem unwilling to give up control over their money supply and to be unable to use monetary policies to achieve domestic goals. I think that the history of the past two decades has made this quite clear.

At the same time, the leading industrial nations believe that exchange rates have been far too volatile and have overshot by substantial degrees and for long periods of time their equilibrium rate (*e.g.*, the U.S. dollar in the mid 1980s). Excessive volatility and gross misalignments can be overcome by the establishment target zones with soft boundaries. As long as the equilibrium exchange rate is estimated to remain near the center of the target zone, the target zone can be defended with monetary policies and policy coordination. Target zones would be changed if the equilibrium exchange rate moves outside or close to the limits of the prevailing target zone. While it may be difficult to agree on what the exact equilibrium exchange rate is, the events since 1985 indicate that it is possible for the leading industrial nations to reach a general agreement on a narrow range within which the equilibrium exchange rate among the world's leading currencies should be. The criticism that the leading industrial nations must either give up control over their money supply or agree to an impossible high degree of policy coordination in order to keep exchange rates with an appropriate target zone, can be answered by saying that each nation will intervene in foreign exchange markets, adjust its money supply, and respond to calls for policy coordination based on its circumstances, the domestic targets that it sets for itself, and the relative importance of these domestic targets.

One thing is clear, balance of payments (as any type of adjustment) is painful. Rather than using only one method of adjustment (such as

33. *See* Richard N. Cooper, *A Monetary System For the Future*, Foreign Aff. (1987).

changes in exchange rates, changes in the money supply, or fiscal and other policy changes) each nation will allow all of the mechanisms of adjustment to operate in various degrees to suit its own specific preferences. Thus, a large nation facing a large external disturbance (such as Japan and Germany facing huge trade surpluses) will want to place a greater share of the adjustment burden on exchange rate changes rather than on other adjustment policies; another large nation facing a large internal imbalance (such as the United States facing huge budget deficits in the 1980s), while allowing some adjustment to the resulting trade imbalance to take place through a depreciation of its currency, would place more of the burden of adjustment on domestic policies. In the case of the United States, this would require cutting the budget deficit.

In this connection, it must be pointed out that external pressure on a country to put its house in order, while certainly not binding, is not entirely irrelevant or ineffective and may reinforce domestic pressures to undertake more forceful domestic action to correct the problem than otherwise. To some extent, this has certainly been true in the case of the United States since 1987 with regard to its budget deficit. Thus, we could say that we already have some degree of *implicit* international policy coordination. Smaller and more specialized economies may also opt for smaller exchange rate flexibility and greater reliance on internal expenditure-changing policies than larger open economies to achieve balance of payments adjustment and is likely to lead to the formation of currency blocks. In fact, we begin to see today the formation of three currency blocks: the dollar, the yen, and the EMS currency with more flexible rates among than within each block, in parallel to the evolution of the same three major international trading blocks.

Rather than a shortcoming, a system of fluctuating exchange rates within wide and soft target zones, by providing the freedom for each nation to determine how much it will rely on the various mechanisms of adjustment, is a crucial advantage of the international financial system being proposed. The broad outline of such a system is already in place today and, while its operation can certainly be strengthened by striving for regular consultations and for as much policy coordination as is feasible under various circumstances among the leading nations, I believe that no other system would be able to better deal with today's international monetary problems. Excessive exchange rate volatility and misalignments can be addressed to a large extent by working with target zones. Different inflation-unemployment trade offs can be reconciled, at least to some extent, by regular consultation and by whatever policy coordination is possible. The inherent inflationary tendency built into the system by the flexibility of exchange rates within the target zones can similarly be curbed, at least to some extent, by consultation and limited policy coordination. This is not as unrealistic as might be thought on purely theoretical grounds. After all, the sharp world-wide inflationary tendencies of the 1970s have been brought under control by the leading nations

within the framework of the present international financial system and in the absence of a great deal of policy coordination.

Bluntly, much greater policy coordination would not be possible without each nation at the same time having to give up its own unique set of domestic targets. But by the actions and pronouncements of their leaders, the leading industrial countries have clearly indicated that they value very highly such freedom and flexibility-limited as it is in today's highly interdependent world. Besides, separation of powers between the executive and legislative branches of government in the United States practically precludes any greater degree of international policy coordination. Furthermore, the leading industrial nations have shown that they can control the worse inflationary excesses that can arise under a flexible exchange rate system with the limited degree of policy coordination that has been possible. In the final analysis, most of the global imbalances faced by the leading industrial nations today are rooted in the huge and persistent budget deficits of the United States, lack of more internal stimulus in Europe in general and Germany in particular, and the unwillingness on the part of Japan to rely more on the expansion of internal demand for growth than on exports to the United States, and cannot be blamed on the operation of the present international financial system itself. Automaticity would have forced the United States to eliminate its budget deficit quickly, but this would have imposed an identical inflation-unemployment trade off on most nations. Most of the flexibility and discretion that nations enjoy under the present and proposed systems would be lost. Nations simply cannot have it both ways. They cannot impose automaticity on themselves and at the same time retain the freedom and discretion to choose the unique set of domestic targets that they prefer.[34]

34. *See* Tobin, *supra* note 29, at 153-59.